

Air Quality Summary—June 2008

Baton Rouge Area

There were four days during the month of June with air quality levels in the “Unhealthy for Sensitive Groups” level. On June 18, Bayou Plaquemine’s 8-hour concentration was at 76 ppb for one hour. The following day, June 19, Baker was over the standard for 3 hours with a high 8-hour concentration of 78 ppb and Port Allen was at 76 ppb for one hour. Three monitors had 8-hour ozone averages above the standard on June 23: Bayou Plaquemine for five hours with a high reading of 86 ppb, Dutchtown for 5 hours with a high of 84 ppb and Carville for 3 hours topping out at 80 ppb. The New Roads monitor was over the standard for two hours on June 24, with a high reading of 77 ppb.

Ozone Action Days were called on June 16, 18, 20, 22, 23 and 24.

Other Areas of the State

The New Orleans area was the only other region in which air quality levels were in the “Unhealthy for Sensitive Groups” range. Ozone levels were over the standard at two sites on June 19: Madisonville for seven hours with a high 8-hour reading of 85 ppb and Kenner for two hours with a high of 77 ppb. The Madisonville monitor was over the standard for 3 hours on June 24, with a high reading of 79 ppb.

Ozone Action Days were called on June 16 and 24.

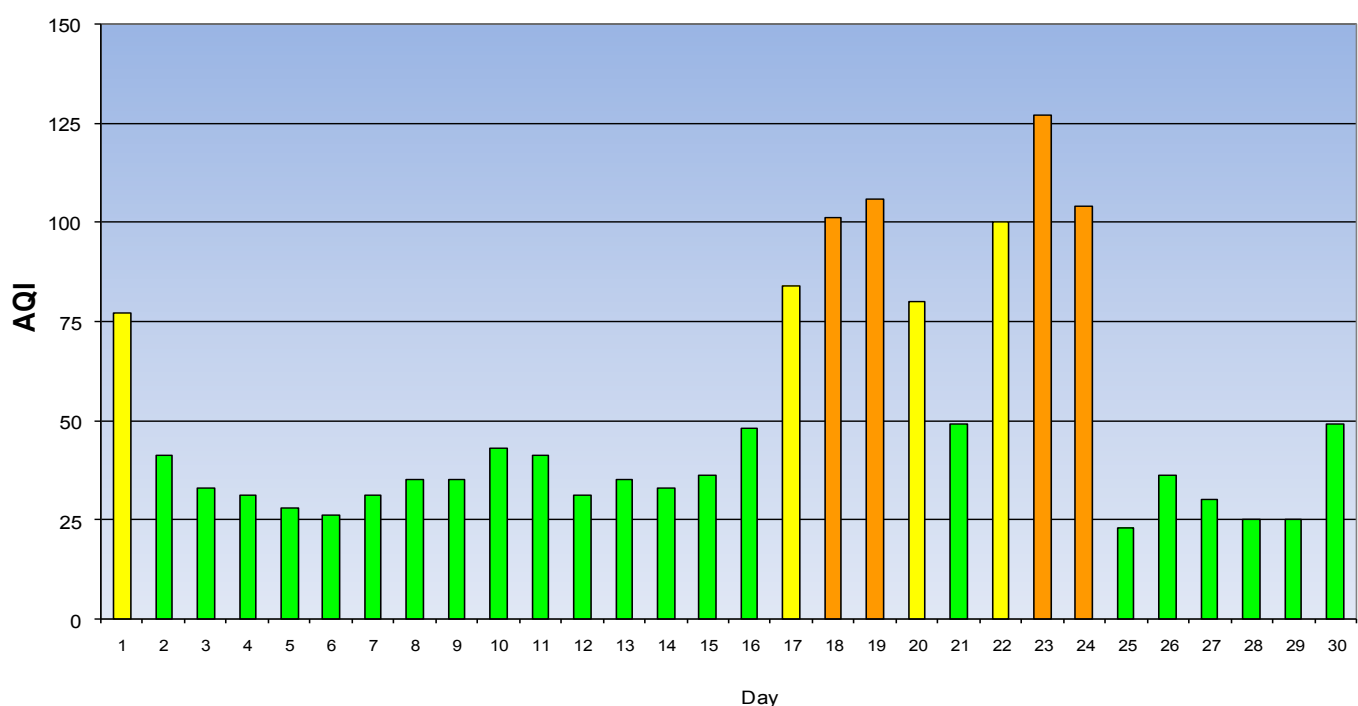
Statewide 8-HR Ozone Readings /AQI Above 75 ppb



0-50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151-200	Unhealthy
201-300	Very Unhealthy

DATE	AQI	8-HR OZONE Concentration (ppb)	MONITORING SITE
6/18/08	101	76	Bayou Plaquemine
6/19/08	124	85	Madisonville
	106	78	Baker
	104	77	Kenner
	101	76	Port Allen
6/23/08	127	86	Bayou Plaquemine
	122	84	Dutchtown
	111	80	Carville
6/24/08	109	79	Madisonville
	104	77	New Roads

Baton Rouge Area Daily Maximum AQI
JUNE 2008



Baton Rouge Climate Summary—June 2008

Prepared by: Jay Grymes
(based on available preliminary data as of July 15, 2008)

June 2008 was a “warm and dry” month for the Baton Rouge metro area. For Baton Rouge's Metro Airport, June is the third consecutive month with an average temperature more than 2° above the 30 -year normal and the 11th consecutive month with an above-average monthly mean temperature. June is the 4th month of 2008 with below-average rainfall for Metro Airport, and the 9th month of the last twelve with rainfall below the mean for that location.

June’s monthly temperature at Metro Airport averaged 82.5°F, 2.8° above-normal and ranking June 2008 among the top 10 “warmest” Junes since 1930 for metro Baton Rouge. Average daily temperatures were above-normal for all but two dates, and included a 24-day consecutive run of above-average temperatures (June 1-24). Maximum daily temperatures during June averaged 92.2°F, 3.0° above-average. Mid-afternoon high temperatures reached or exceeded 90° on 27 days, with three days hitting 95°F; climatologically, we average 18-19 days with highs at or above 90° during June.

Table 1: Sky Condition (to 12,000 ft) based on ASOS observations from Baton Rouge Metro Airport during “daylight” hours.

Sky Condition: Sunrise to Sunset (Sky Coverage)	Clear to Mostly Sunny (0/10ths – 3/10ths)	Partly Cloudy / Partly Sunny (4/10ths – 6/10ths)	Mostly Cloudy to Cloudy (7/10ths – 10/10ths)
No. Days	10	19	1

Duration of “daylight” hours (Sunrise to Sunset) ranged from approximately 13 hrs, 59 min (June 1) to 14 hrs, 7 min (June 20, the Summer Solstice). “Civil Twilight” adds almost one hour of indirect sunlight to the day.

June daily "adjusted" solar radiation data from the LSU-Ben Hur Farm (Figures 1 & 2) suggest a modest reduction in daily incoming shortwave energy during the course of the month, a reflection of an increase in cloud cover (and a slightly "wetter" weather pattern) experienced during the latter half of June.

Rainfall at Metro Airport totaled 3.52” for June, 1.81” below-normal. However, June historical monthly rainfall (since 1930) display a skewed distribution, and arithmetic normals (averages) can be misleading. June tends to be the "driest" of the high-sun months, yet extremely "wet" Junes are evident in the historical record, often the result of active tropical weather. Comparison of June 2008's monthly total with the 1930-2008 June monthly *median* (3.83") suggests that while a "dry" month, the June 2008 departure was not exceptional.

Metro Airport reported 9 days-with-rain (≥ 0.01”) and 1 day (June 20) with more than 1" for a 24-hour total -- these numbers are not far from the 30-year averages of 10-11 and 1-2 days, respectively.

As is typical for south Louisiana during the high-sun months, June monthly rain totals reflected the "hit-or-miss" nature of mainly-afternoon showers and thunderstorms across the greater Baton Rouge metro area. June 2008 monthly totals ranged from more than 5" to under 2" (Table 2). Most sites reflect the regional pattern of "drier" weather persisting through the first half of the month, with more frequent showers during the latter two weeks.

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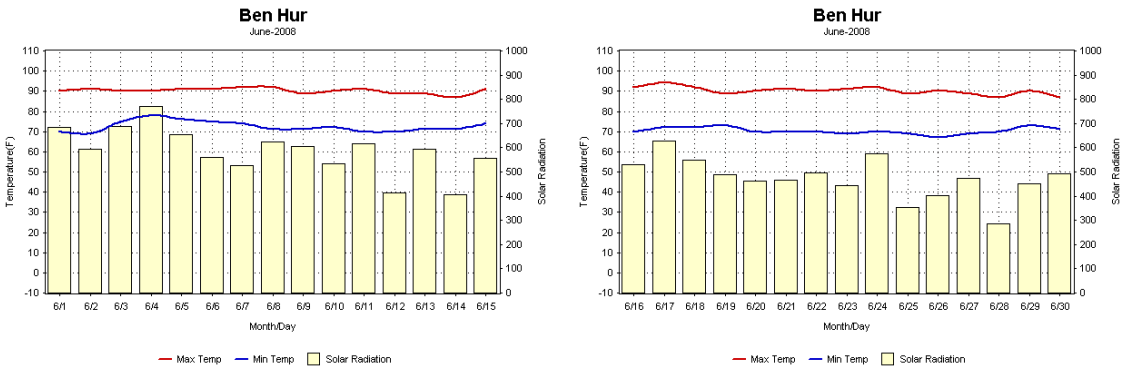
Table 2: June 2008 rainfall for selected NWS and LSU stations across the Baton Rouge metro area. (Data are preliminary.)

NWS Location	June Rainfall	June DFN	No. Days ≥ 0.01"	No. Days ≥ 1.00"
Baker	2.51"	-3.25"	10	0
BR - Metro AP	3.52"	-1.81"	9	1
BR - Concord Estates	3.73"	-2.24"	13	1
BR - Sherwood Forest	4.36"	-1.02"	11	1
BR - LSU Campus	- n / a -	- n / a -	--	--
Brusly (2 W)	3.23"	-2.12"	14	0
Clinton (5 SE)	4.18"	-0.74"	9 (est.)	--
Denham Springs	5.53"	+0.22"	10	1
Gonzales	3.93"	-2.23"	12	1
Jackson (3 E)	- n / a -	- n / a -	--	--
Livingston	2.27"	-3.48"	15	0
LSU-Ben Hur Farm	1.71"	-4.10"	13	0
New Roads	3.70"	-0.87"	9	1
Oaknolia	5.15"	+0.13"	8	3
Port Allen	3.33"	-2.26"	10	1
Plaquemine (2 N)	4.59"	-0.75"	10	2
St. Francisville	3.80"	-1.17"	12	0
St. Gabriel	1.72"	-4.34"	9	0
Zachary	4.30"	-1.03"	11	1

* DFN – Departure-from-Normal

Wind data from Metro Airport and regional LAIS stations indicate that surface winds (10-meter observations) were generally light, especially during the latter half of June. Historical data indicate that June winds tend to average around 5-7 mph, but regional data suggest that daily windspeeds averaged under 5 mph for most of the month.

Figures 1 & 2: daily solar radiation and maximum and minimum temperatures as recorded by the LSU AgCenter/LAIS Weather Station located at LSU-Ben Hur Farm (Nicholson Dr.)



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*Jay Grymes, LSU AgCenter Climatologist and WAFB Chief Meteorologist, provides the climatology portion of this report as a free service to DEQ and the citizens of Louisiana.